

Table S1. Information of DEGs with higher expression level in EcR prawns.

GeneID	Description	Species
Unigene0075750	Proteasome subunit alpha type-4	<i>Trachymyrmex septentrionalis</i>
Unigene0025033	Proline-rich protein	<i>Thecamonas trahens</i> ATCC 50062
Unigene0075630	Hypothetical protein PC101070.00.0, partial	<i>Plasmodium chabaudi chabaudi</i>
Unigene0050620	Hypothetical protein BRAFLDRAFT_92590	<i>Branchiostoma floridae</i>
Unigene0076150	SJCHGC01393 protein	<i>Schistosoma japonicum</i>
Unigene0027566	Uncharacterized protein LOC102810112	<i>Saccoglossus kowalevskii</i>
Unigene0055895	Decapping and exoribonuclease protein-like	<i>Saccoglossus kowalevskii</i>
Unigene0052995	Hypothetical transcript	<i>Hymenolepis microstoma</i>
Unigene0020574	Endonuclease-reverse transcriptase	<i>Lasius niger</i>
Unigene0062719	Reverse transcriptase	<i>Lasius niger</i>
Unigene0067624	Transposon ty3-i gag-pol polyprotein	<i>Lasius niger</i>
Unigene0068232	RNA-directed dna polymerase from mobile element jockey-like protein, partial	<i>Lasius niger</i>
Unigene0052994	rRNA promoter binding protein	<i>Echinococcus granulosus</i>
Unigene0077568	rRNA promoter binding protein	<i>Echinococcus granulosus</i>
Unigene0052994	rRNA promoter binding protein	<i>Echinococcus granulosus</i>
Unigene0055574	Transposon Ty3-I Gag-Pol polyprotein, partial	<i>Exaíptasia pallida</i>
Unigene0075830	Retrovirus-related Pol polyprotein from transposon 17.6	<i>Exaíptasia pallida</i>
Unigene0010682	Pro-Pol polyprotein	<i>Exaíptasia pallida</i>
Unigene0028718	Integrator complex subunit 4	<i>Exaíptasia pallida</i>
Unigene0029489	Retrovirus-related Pol polyprotein from transposon opus	<i>Exaíptasia pallida</i>
Unigene0075682	Hypothetical protein AC249_AIPGENE24709	<i>Exaíptasia pallida</i>
Unigene0045545	Integrase/recombinase xerD-like, partial	<i>Exaíptasia pallida</i>
Unigene0022024	Fibrillin-1	<i>Exaíptasia pallida</i>
Unigene0013991	Neurotrypsin	<i>Exaíptasia pallida</i>
Unigene0033842	Retrovirus-related Pol polyprotein from type-1 retrotransposable element R2	<i>Exaíptasia pallida</i>
Unigene0016956	Retrovirus-related Pol polyprotein from transposon 17.6	<i>Exaíptasia pallida</i>
Unigene0022248	Transposon TX1 uncharacterized 149 kDa protein	<i>Exaíptasia pallida</i>

Unigene0074252	RNA-directed DNA polymerase from mobile element jockey-like	<i>Strongylocentrotus purpuratus</i>
Unigene0012856	RNA-directed DNA polymerase from mobile element jockey-like	<i>Strongylocentrotus purpuratus</i>
Unigene0075941	Uncharacterized protein LOC100891119	<i>Strongylocentrotus purpuratus</i>
Unigene0064171	Cysteine sulfinic acid decarboxylase	<i>Litopenaeus vannamei</i>
Unigene0057678	Alkaline phosphatase	<i>Litopenaeus vannamei</i>
Unigene0065508	ZAN protein precursor	<i>Ciona intestinalis</i>
Unigene0026012	Fibronectin-like, partial	<i>Ciona intestinalis</i>
Unigene0064326	Disrupted in renal carcinoma protein 2	<i>Daphnia magna</i>
Unigene0073362	Chorion peroxidase precursor	<i>Daphnia magna</i>
Unigene0063941	Daphnid bacterial-ribosomal-RNA-like, possible HGT	<i>Daphnia magna</i>
Unigene0061920	Hypothetical protein, partial	<i>Daphnia magna</i>
Unigene0024515	Cathepsin L, partial	<i>Daphnia magna</i>
Unigene0005355	Enzymatic polyprotein	<i>Daphnia magna</i>
Unigene0064045	Peroxisome biogenesis factor 10	<i>Daphnia magna</i>
Unigene0041112	Hypothetical protein NEMVEDRAFT_v1g142724	<i>Nematostella vectensis</i>
Unigene0036248	Predicted protein	<i>Nematostella vectensis</i>
Unigene0004359	14-3-3 protein, partial	<i>Penaeus monodon</i>
Unigene0042568	Thromboxane A synthase	<i>Penaeus monodon</i>
Unigene0002542	StAR-related lipid transfer protein 3	<i>Penaeus monodon</i>
Unigene0063752	Vitellogenin	<i>Pandalus hypsinotus</i>
Unigene0028810	Apolipoprotein D	<i>Zootermopsis nevadensis</i>
Unigene0020378	G-protein coupled receptor Mth2	<i>Zootermopsis nevadensis</i>
Unigene0065672	Proton-coupled amino acid transporter 4	<i>Zootermopsis nevadensis</i>
Unigene0075897	Chorion peroxidase	<i>Microplitis demolitor</i>
Unigene0032105	Pprobable glycosidase CRH1, partial	<i>Hydra vulgaris</i>
Unigene0053285	RNA-directed DNA polymerase from mobile element jockey-like	<i>Hydra vulgaris</i>
Unigene0050615	Uncharacterized protein C2orf16-like	<i>Hydra vulgaris</i>
Unigene0074604	Dipeptidase 1-like, partial	<i>Cephus cinctus</i>
Unigene0048607	Protein PBMUCL2	<i>Melipona quadrifasciata</i>
Unigene0052257	Cdc42 like protein	<i>Melipona quadrifasciata</i>
Unigene0074075	Hypothetical protein HELRODRAFT_158911	<i>Helobdella robusta</i>
Unigene0039229	Hypothetical protein T02_16311	<i>Trichinella nativa</i>
Unigene0027377	PiggyBac transposable element-derived protein 4-like	<i>Amyeloidis transitella</i>
Unigene0065511	Uncharacterized protein LOC100568563	<i>Acyrtosiphon pisum</i>
Unigene0041961	RNA-directed DNA polymerase from mobile element jockey-like	<i>Acyrtosiphon pisum</i>

Unigene0030242	SCAN domain-containing protein 3-like	<i>Acyrtosiphon pisum</i>
Unigene0069719	Reverse transcriptase	<i>Daphnia pulex</i>
Unigene0041647	Reverse transcriptase, partial	<i>Nuttalliella namaqua</i>
Unigene0050597	Hypothetical protein M514_07931	<i>Trichuris suis</i>
Unigene0055353	Ferlin [Plasmodium cynomolgi strain B]	<i>Plasmodium cynomolgi</i>
Unigene0050616	Mucin-5AC-like	<i>Diaphorina citri</i>
Unigene0050619	Mucin-5AC-like	<i>Diaphorina citri</i>
Unigene0025349	RNA-directed DNA polymerase from mobile element jockey-like	<i>Diaphorina citri</i>
Unigene0005091	Craniofacial development protein 2-like, partial	<i>Diaphorina citri</i>
Unigene0007503	Peroxidase-like	<i>Diaphorina citri</i>
Unigene0045903	Endonuclease-reverse transcriptase	<i>Danaus plexippus</i>
Unigene0055798	Pro-resilin-like	<i>Diuraphis noxia</i>
Unigene0029960	SCAN domain-containing protein 3-like	<i>Diuraphis noxia</i>
Unigene0029918	Tubulin	<i>Tetrahymena thermophila</i> SB210
Unigene0073421	Tubulin/FtsZ family, GTPase domain protein	<i>Tetrahymena thermophila</i> SB210
Unigene0076277	Hormone receptor 4-like	<i>Aplysia californica</i>
Unigene0050617	Hypothetical protein LOTGIDRAFT_72903, partial	<i>Lottia gigantea</i>
Unigene0030615	Hypothetical protein LOTGIDRAFT_172470	<i>Lottia gigantea</i>
Unigene0021111	Tigger transposable element-derived protein 1-like	<i>Octopus bimaculoides</i>
Unigene0029175	Serine protease	<i>Scylla paramamosain</i>
Unigene0066327	RNA-directed DNA polymerase (reverse transcriptase) domain containing protein	<i>Haemonchus contortus</i>
Unigene0048616	Kazal-type serine proteinase inhibitor 4, partial	<i>Procambarus clarkii</i>
Unigene0013707	Methyltransferase-like protein, partial	<i>Latrodectus hesperus</i>
Unigene0034329	Estrogen sulfotransferase	<i>Scylla olivacea</i>
Unigene0036440	Estrogen sulfotransferase	<i>Scylla olivacea</i>
Unigene0009430	Estrogen sulfotransferase	<i>Scylla olivacea</i>
Unigene0027998	General transcription factor IIH subunit 4	<i>Wasmannia auropunctata</i>
Unigene0010081	Zinc metalloproteinase nas-4-like	<i>Wasmannia auropunctata</i>
Unigene0062188	C-reactive protein 1.1-like	<i>Limulus polyphemus</i>
Unigene0055390	Cornifin-B-like, partial	<i>Limulus polyphemus</i>
Unigene0041371	Mite allergen Lep d 7-like, partial	<i>Limulus polyphemus</i>
Unigene0015713	LOW QUALITY PROTEIN: arylsulfatase B-like	<i>Limulus polyphemus</i>

Unigene0013082	Collagen alpha-1(I) chain-like	<i>Limulus polyphemus</i>
Unigene0068101	Lysosomal aspartic protease	<i>Cerapachys biroi</i>
Unigene0072629	PiggyBac transposable element-derived protein 4-like	<i>Papilio xuthus</i>
Unigene0004694	Probable H/ACA ribonucleoprotein complex subunit 1 precursor	<i>Papilio xuthus</i>
Unigene0009236	Reverse transcriptase, partial	<i>Anopheles arabiensis</i>
Unigene0041646	Golgin subfamily A member 6-like protein 22	<i>Acropora digitifera</i>
Unigene0028734	TNF receptor-associated factor 5-like isoform X2	<i>Acropora digitifera</i>
Unigene0003085	RNA-directed DNA polymerase from mobile element jockey-like	<i>Acropora digitifera</i>
Unigene0018800	Astacin-like metalloprotease toxin 5	<i>Acropora digitifera</i>
Unigene0026600	Zinc finger protein 36, C3H1 type-like 1, partial	<i>Stegodyphus mimosarum</i>
Unigene0020381	G-protein coupled receptor Mth2-like isoform X3	<i>Monomorium pharaonis</i>
Unigene0028497	Voltage-dependent calcium channel gamma-5 subunit	<i>Tribolium castaneum</i>
Unigene0006138	Microtubule-actin cross-linking factor 1 isoform X24	<i>Dinoponera quadriceps</i>
Unigene0068154	Tubulin alpha-1 chain, partial	<i>Trichinella murrelli</i>
Unigene0056892	Fibrillin-3-like	<i>Lingula anatina</i>
Unigene0066955	Nose resistant to fluoxetine protein 6-like isoform X2	<i>Lingula anatina</i>
Unigene0050124	Multiple epidermal growth factor-like domains protein 8	<i>Biomphalaria glabrata</i>
Unigene0006133	Transposase, ISXO2-like domain-containing protein	<i>Strongyloides ratti</i>
Unigene0036754	Sperm gelatinase-like protease	<i>Macrobrachium rosenbergii</i>
Unigene0022901	Male reproductive-related protein A	<i>Macrobrachium rosenbergii</i>
Unigene0060515	Male reproductive-related protein A	<i>Macrobrachium rosenbergii</i>
Unigene0010280	Crustin	<i>Macrobrachium rosenbergii</i>
Unigene0022902	Male reproductive-related protein A	<i>Macrobrachium rosenbergii</i>
Unigene0026567	Uncharacterized protein LOC107217456	<i>Neodiprion lecontei</i>
Unigene0011508	Retrovirus-related Pol polyprotein from type-1 retrotransposable element R2, partial	<i>Toxocara canis</i>

Unigene0065550	Vitellogenin 2	<i>Pandalopsis japonica</i>
Unigene0058771	Chitinase	<i>Pandalopsis japonica</i>
Unigene0052411	Vitellogenin 2	<i>Pandalopsis japonica</i>
Unigene0023257	Gag-Pol polyprotein	<i>Trachymyrmex cornetzi</i>
Unigene0023631	Matrix metalloproteinase 9, partial	<i>Paracyclopina nana</i>
Unigene0023628	Kielin/chordin-like protein isoform X2	<i>Pogonomyrmex barbatus</i>
Unigene0001122	Kazal-type protease inhibitor	<i>Macrobrachium nipponense</i>
Unigene0000359	Kazal-type protease inhibitor	<i>Macrobrachium nipponense</i>
Unigene0003459	Uncharacterized protein LOC105397399	<i>Plutella xylostella</i>
Unigene0004520	Aminopeptidase N	<i>Trichogramma pretiosum</i>
Unigene0008214	Hemocyanin	<i>Palaemon carinicauda</i>
Unigene0036597	Hemocyanin	<i>Palaemon carinicauda</i>
Unigene0016779	Vitellogenin	<i>Palaemon carinicauda</i>
Unigene0022977	Facilitated trehalose transporter Tret1 isoform X1	<i>Athalia rosae</i>
Unigene0016233	Hypothetical protein ALC62_05715	<i>Cyphomyrmex costatus</i>
Unigene0060722	Facilitated trehalose transporter Tret1-like	<i>Cimex lectularius</i>
Unigene0013764	Tubulin alpha-1 chain-like	<i>Halyomorpha halys</i>
Unigene0029127	TPPP family protein CG45057 isoform X1	<i>Drosophila ficusphila</i>
Unigene0015995	Uncharacterized protein LOC105336494	<i>Crassostrea gigas</i>
Unigene0033404	Cathepsin B	<i>Pandalus borealis</i>